

FIG. 1
(Prior Art)

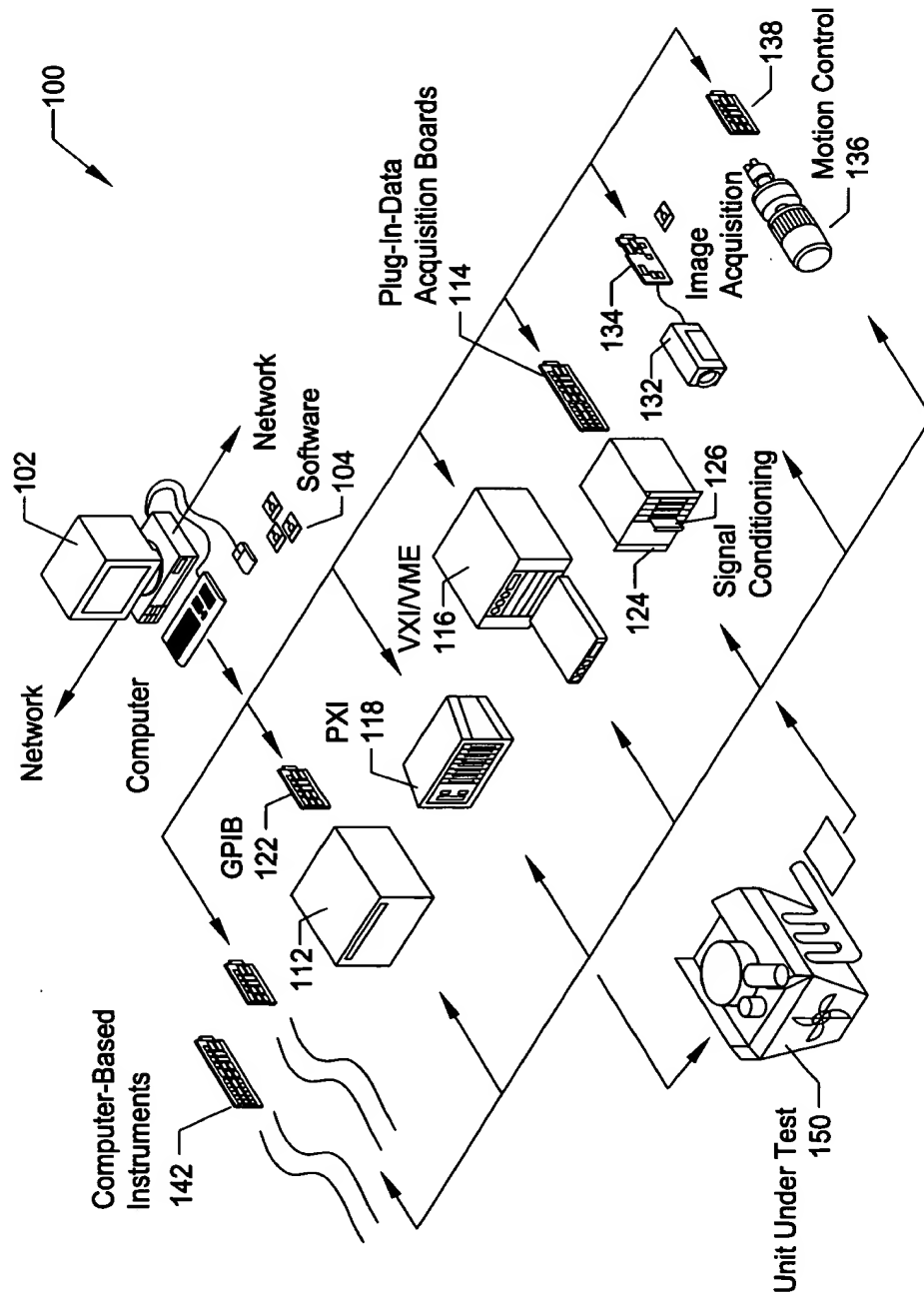


FIG. 3A

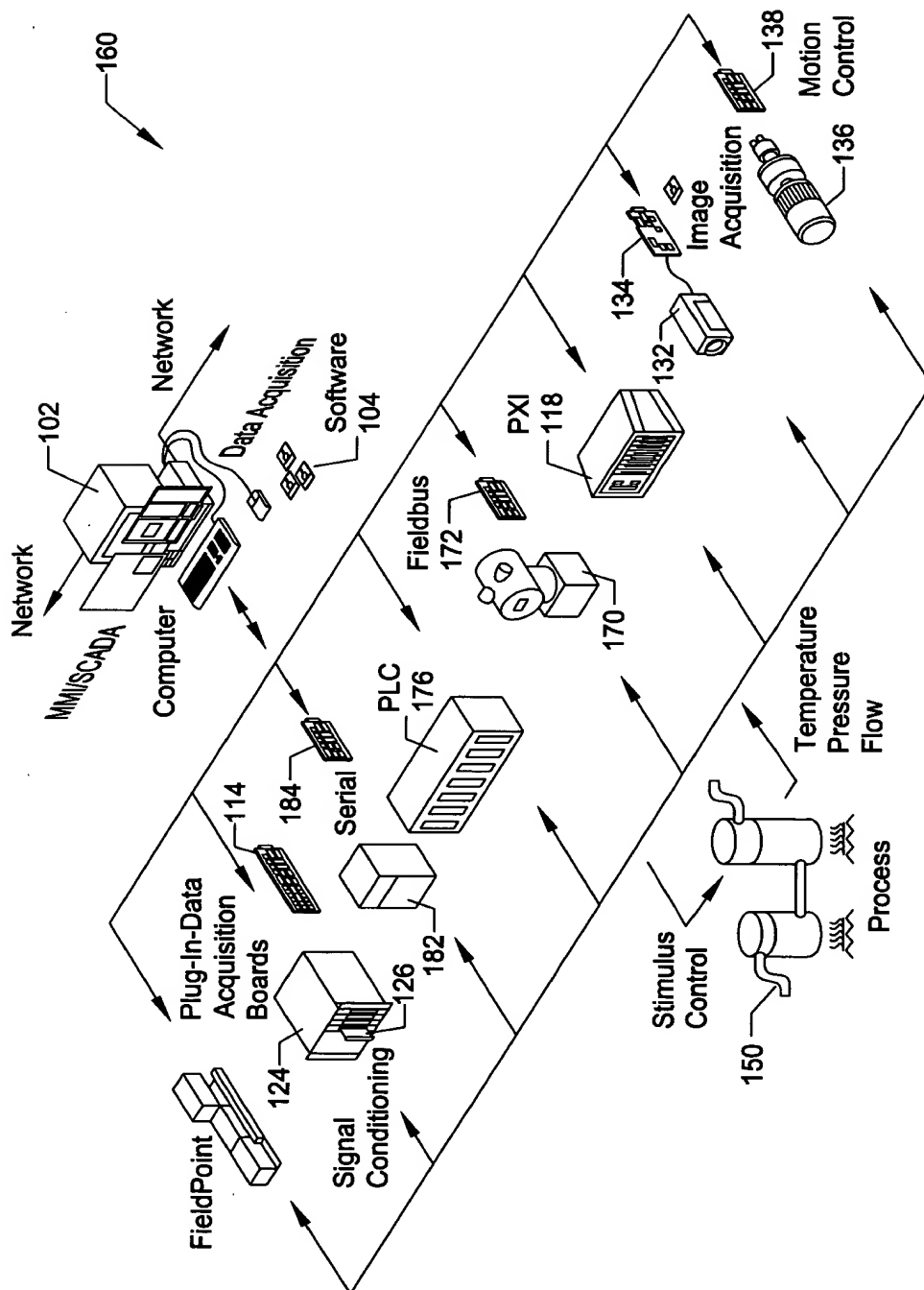


FIG. 3B

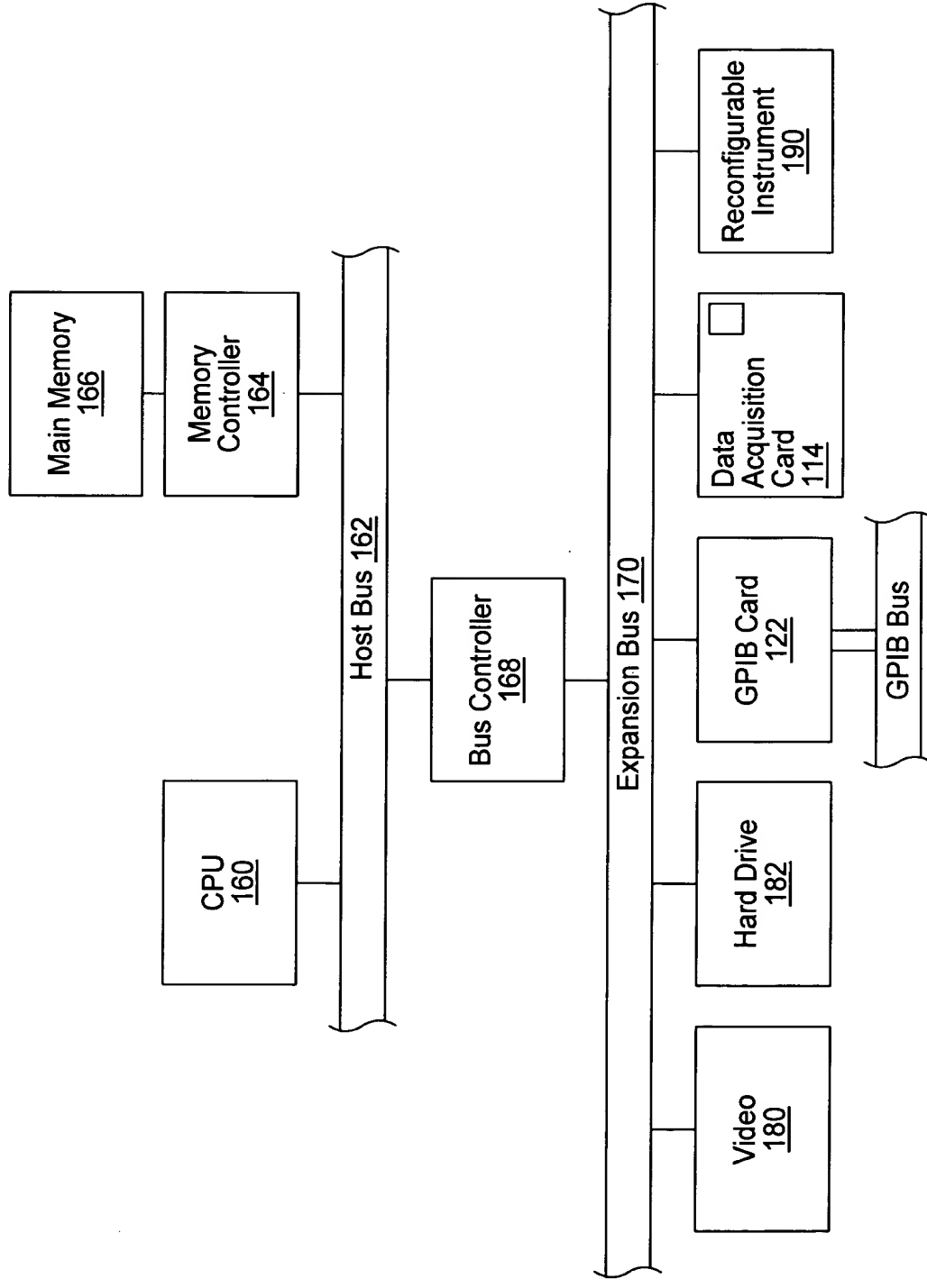


FIG. 4

Create state diagram information, e.g., in response to user
input
200



GPG program receives state diagram information
202



GPG program programmatically generates a graphical
program (or graphical program portion) based on the state
diagram information
204

FIG. 5

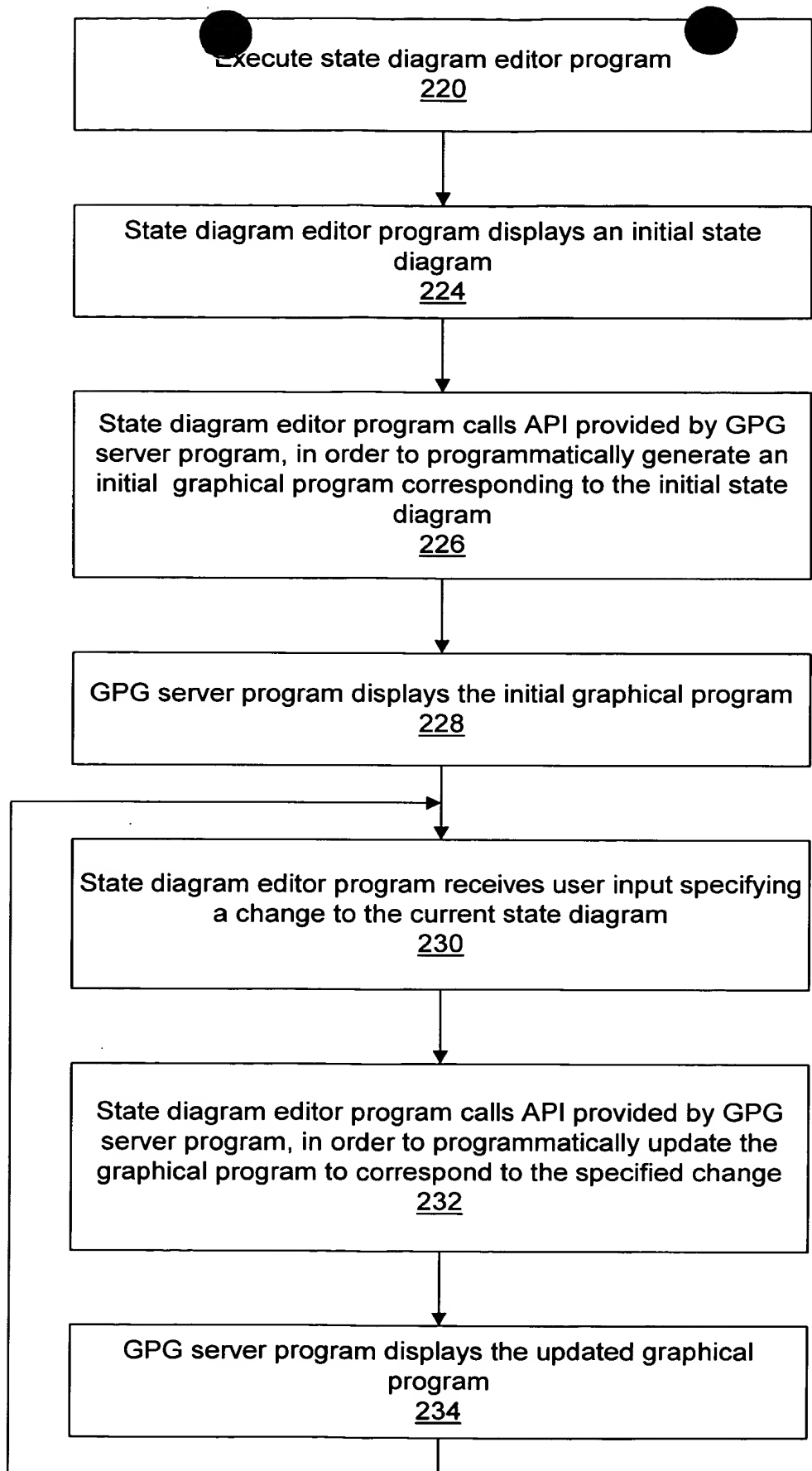


FIG. 6

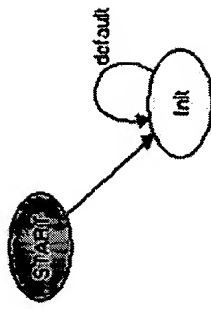


FIG. 7

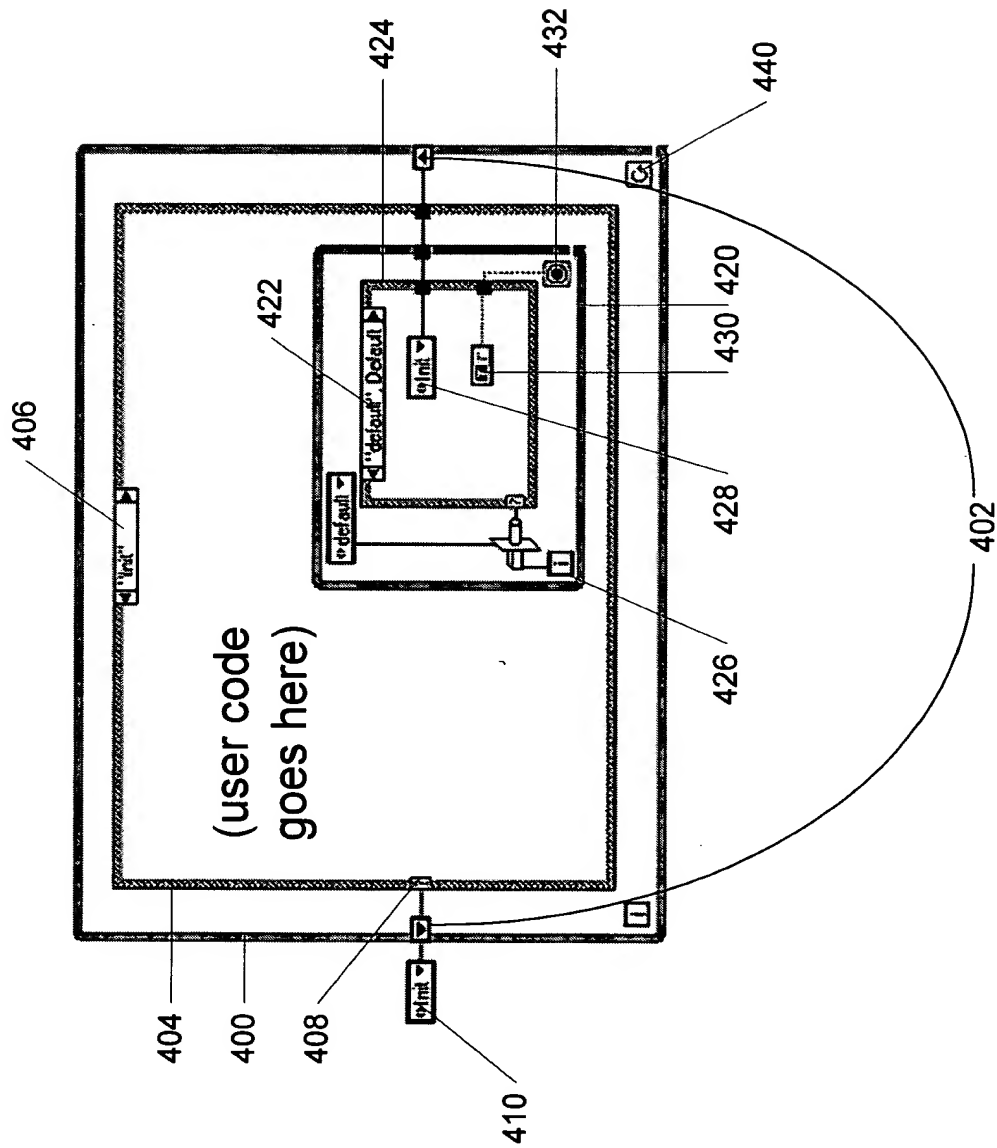


FIG. 8

STATE MACHINE

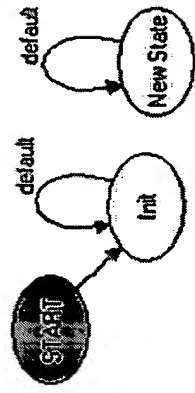


FIG. 9

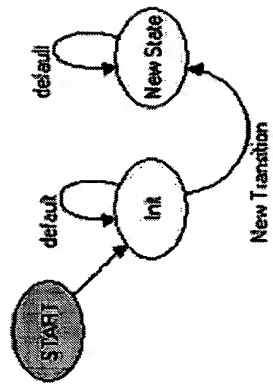


FIG. 11

STATE MACHINE

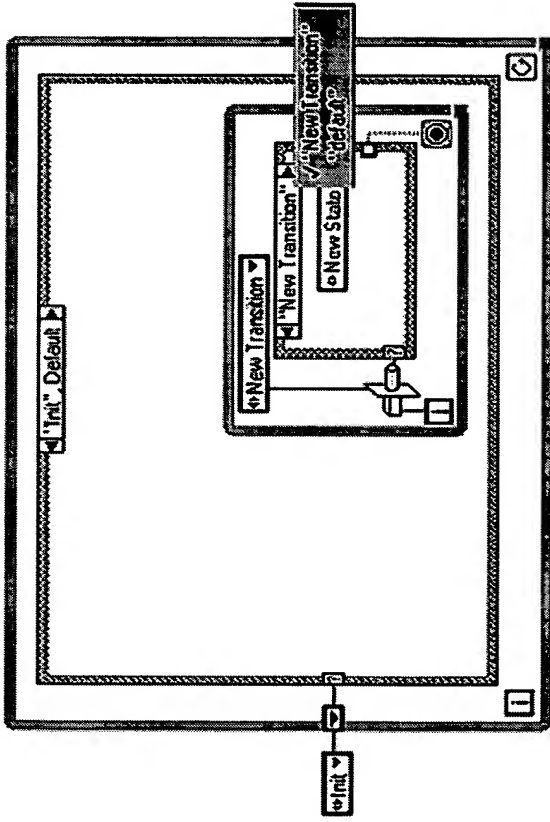


FIG. 12

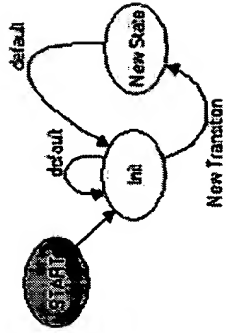


FIG. 13

OBJECT TOOLBOX

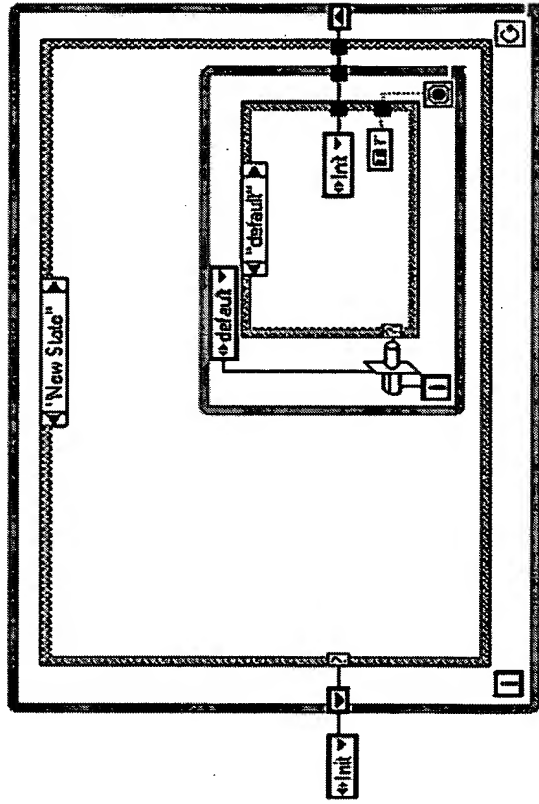


FIG. 14

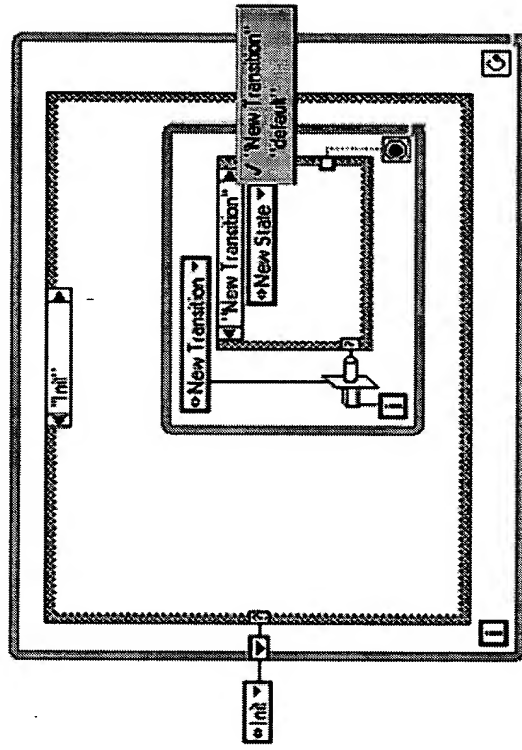


FIG. 16

The \mathbb{Z}_2 -action on \mathbb{R}^n is defined by $\sigma(x) = -x$. The quotient space $\mathbb{R}^n / \mathbb{Z}_2$ is homeomorphic to \mathbb{R}^n_+ , where $\mathbb{R}^n_+ = \{x \in \mathbb{R}^n : x_1 \geq 0\}$. The map $\pi: \mathbb{R}^n \rightarrow \mathbb{R}^n_+$ is defined by $\pi(x) = (|x_1|, x_2, \dots, x_n)$. The map π is a homeomorphism from $\mathbb{R}^n / \mathbb{Z}_2$ to \mathbb{R}^n_+ . The map π is a homeomorphism from $\mathbb{R}^n / \mathbb{Z}_2$ to \mathbb{R}^n_+ . The map π is a homeomorphism from $\mathbb{R}^n / \mathbb{Z}_2$ to \mathbb{R}^n_+ .

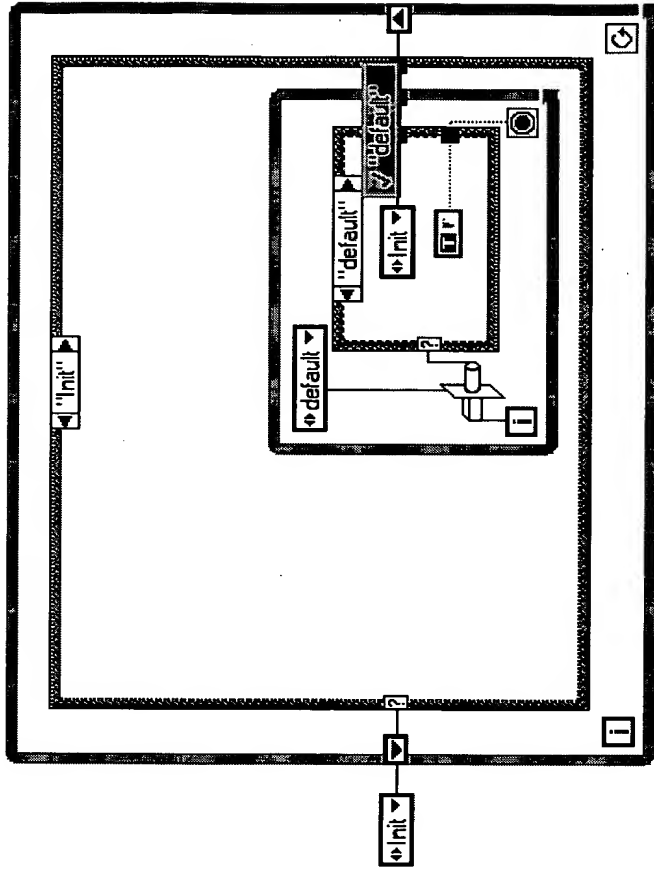


FIG. 17

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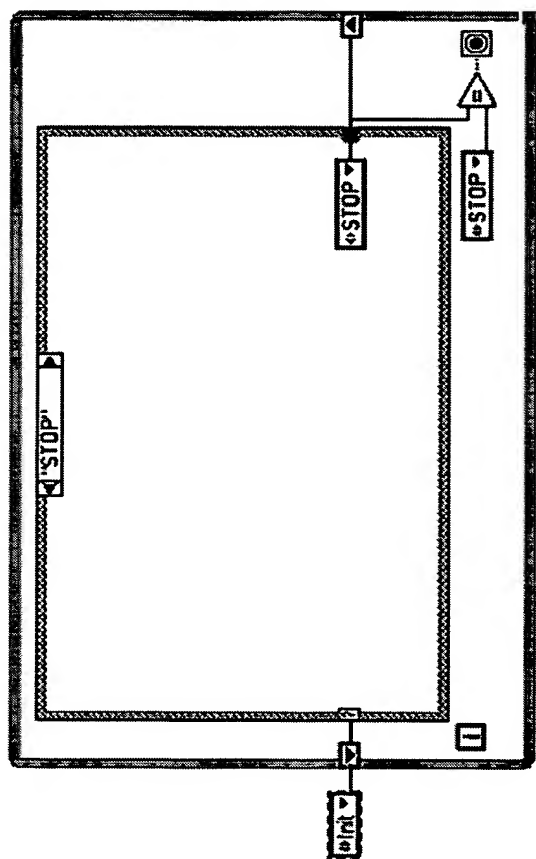


FIG. 18

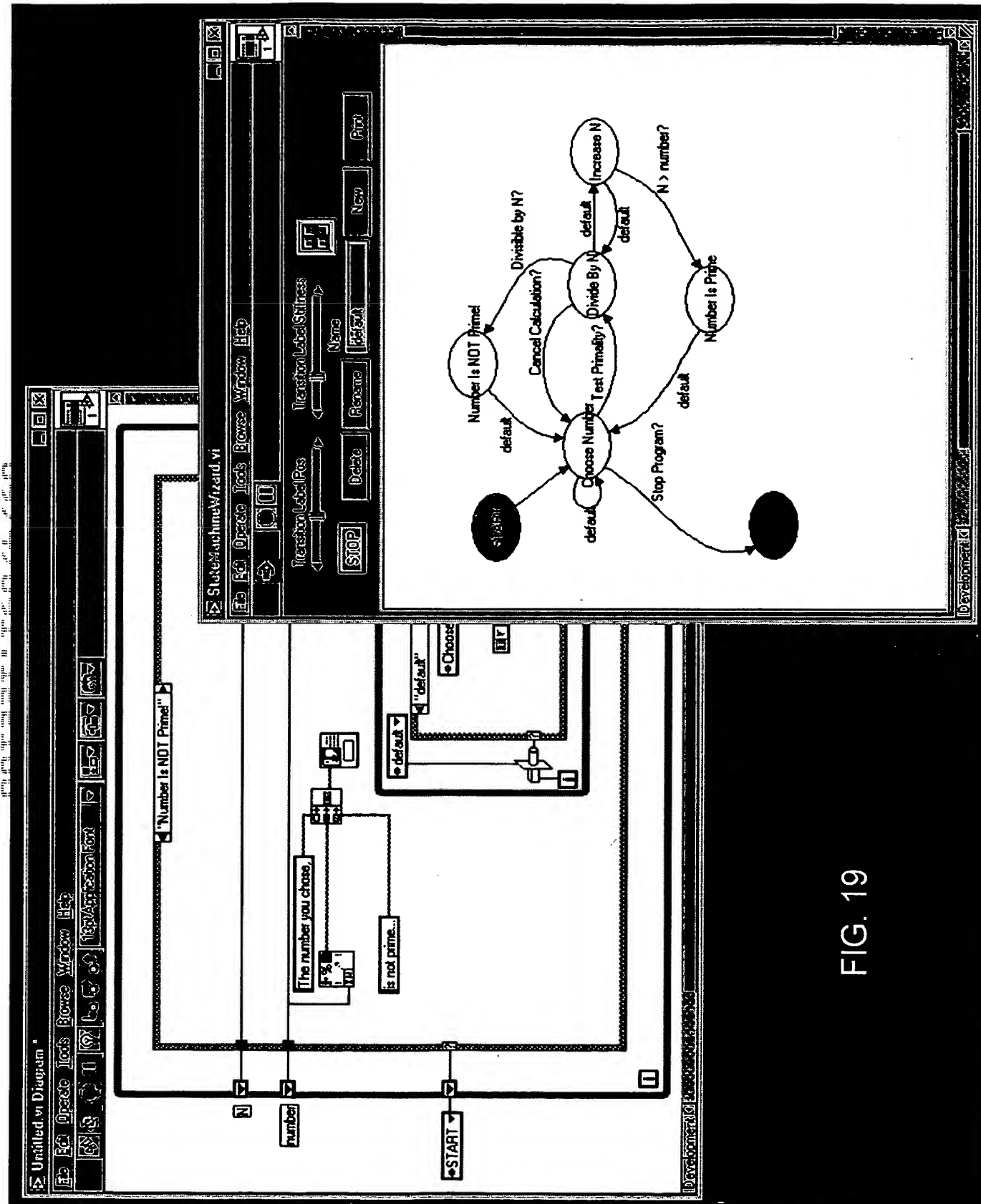


FIG. 19

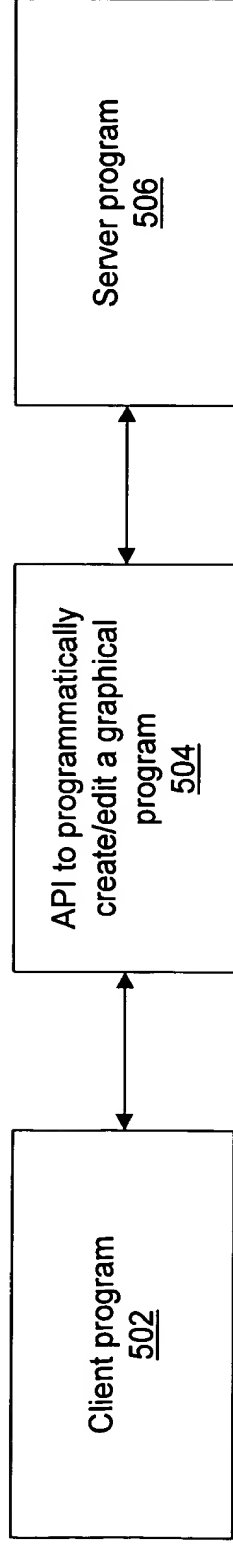


FIG. 20